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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,850	11/25/2003	Nimrod Megiddo	ARC920030085US1	6569
7590 Frederick W. Gibb, III McGinn & Gibb, PLLC Suite 304 2568-A Riva Road Annapolis, MD 21401		10/16/2007	EXAMINER WU, JUNCHUN	
			ART UNIT 2191	PAPER NUMBER
			MAIL DATE 10/16/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/723,850

Applicant(s)

MEGIDDO, NIMROD

Examiner

Junchun Wu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5-8,11-13,17-19 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-8,11-13,17-19, and 23-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to the amendment filed on July 12, 2007.
2. Claims 2-4, 9-10, 14-16, and 20-22 have been canceled.
3. Claims 1, 5-8, 11-13, 17-19, and 23-25 have been amended.
4. Claims 1, 5-8, 11-13, 17-19, and 23-25 are pending.

#### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 19, 23-25 are rejected under 35 U.S.C. 101 because claims fail to claim the program recorded on an appropriate computer readable medium so as to be structurally and functionally interrelated to the medium and permit the function of the descriptive material to be realized. Thus, the claimed invention is directed to non-statutory subject matter.

#### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 1-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Li (US Patent No. 6,144,954).

9. Per claim 1 (Currently Amended)

Li discloses

A method of instructing a computer program to self-optimize, said method comprising:

- inputting a selection command that selects one function from a list of pre- selected functions into said computer program (col.21 lines 16-23 "*The pre-specified optimizing criteria for a computer software generation, modification, use, maintenance, or performing a specific function may be a feature selected from the group consisting of ...*"), wherein each function from said list of pre- selected functions is associated with a reward (col.21 lines 26-30 "*...selected control variables to determine the improving or optimizing variable combination*").
- allowing a learning protocol in said computer program to track and reward said one function that is selected and to determine an approximate optimal policy of choice of operation of said computer program based on said selection command (col.13 lines 41-46 "*The automation manager may also interact with self-optimizing system by reading the three of four options on the display monitor picturing the relative risks and rewards of the options, selecting the best option based on the most current demand and supply situation, and directing the system to re-optimize.*").

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10. Per claims 5, 17 and 23 (Currently Amended)

the rejection of claims 1, 13 and 19 are incorporated respectively and Li further discloses

- comprising inputting a rule command that establishes a rule for said computer program on how to determine said approximate optimal choice of operation (col.14 lines 54-67 *“self-optimization machine readily and automatically generates these and other similar rules in computer-coded form, ...”*).

11. Per claims 6, 18 and 24 (Currently Amended)

the rejection of claims 1, 13 and 19 are incorporated and Li further discloses

- comprising inputting a reward command that provides a reward, at a point of choice in said computer program, for said one function selected by said selection command, which results in said approximate optimal choice for self- optimizing said computer program (col.13 lines 41-46 *“The automation manager may also interact with self-optimizing system by reading the three of four options on the display monitor picturing the relative risks and rewards of the options, selecting the best option based on the most current demand and supply situation, and directing the system to re-optimize.”*).

12. Per claim 7 (Currently Amended)

Li discloses

A method of optimizing a computer program, said method comprising:

- specifying at least one point of choice in said computer program (col.20 lines 5-9 *“...the various optimizing steps such as CAE, CAT, CAO, and CAC... ”*)

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- defining a set of alternate choices at each point of choice (col.19 lines 58-62), wherein said set of alternate choices include operational choices comprises:
- inputting a selection command that selects one function from a list of pre-selected functions into said computer program (col.21 lines 16-23 "*The pre-specified optimizing criteria for a computer software generation, modification, use, maintenance, or performing a specific function may be a feature selected from the group consisting of ...*") wherein each function from said list of pre-selected functions is associated with a reward (col.21 lines 26-30 "*...selected control variables to determine the improving or optimizing variable combination*").
- allowing a learning protocol in said computer program to track and reward said one function that is selected to determine an approximate optimal operation of said computer program based on said selection command (col.13 lines 41-46 "*The automation manager may also interact with self-optimizing system by reading the three of four options on the display monitor picturing the relative risks and rewards of the options, selecting the best option based on the most current demand and supply situation, and directing the system to re-optimize.*").
- setting at least one feedback point for each point of choice (col.10 lines 10-11 "*The optimization is sent from CAO step to feed back the information...*").

13. Per claim 8 (Currently Amended)

the rejection of claim 7 is incorporated and Li further discloses

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- comprising allowing a learning protocol in said computer program to determine an approximate optimal operation of said computer program based on said specifying, defining, and setting (col.10 lines 54-60).

14. Per claim 11 (Currently Amended)

the rejection of claim 8 is incorporated and Li further discloses

set of alternate choices include operational choices, further comprises:

- inputting a rule command into said computer program, wherein said rule command establishes a rule on how to determine said approximate optimal operation (col.14 lines 54-67 "*self-optimization machine readily and automatically generates these and other similar rules in computer-coded form, ...*").

15. Per claim 12 (Currently Amended)

the rejection of claim 8 is incorporated and Li further discloses

set of alternate choices include operational choices, and wherein said method further comprises:

- inputting a reward command into said computer program, wherein said reward command provides reward in said computer program, which results in said approximate optimal choice for optimizing said computer program (col.13 lines 41-46 "*The automation manager may also interact with self-optimizing system by reading the three of four options on the display monitor picturing the relative risks and rewards of the options, selecting the best option based on the most current demand and supply situation, and directing the system to re-optimize.*").

## 16. Per claim 13 (Currently Amended)

A program storage device readable by computer, tangibly embodying a program of instructions executable by said computer to perform a method of instructing a computer program to self-optimize, said method comprising:

- inputting a selection command that selects one function from a list of pre-selected functions into said computer program (col.21 lines 16-23 “*The pre-specified optimizing criteria for a computer software generation, modification, use, maintenance, or performing a specific function may be a feature selected from the group consisting of ...*”), wherein each function from said list of pre-selected functions is associated with a reward (col.21 lines 26-30 “*...selected control variables to determine the improving or optimizing variable combination*”).
- allowing a learning protocol in said computer program to track and reward said one function that is selected and to determine an approximate optimal choice of operation of said computer program based on at least said commands selection command (col.13 lines 41-46 “*The automation manager may also interact with self-optimizing system by reading the three of four options on the display monitor picturing the relative risks and rewards of the options, selecting the best option based on the most current demand and supply situation, and directing the system to re-optimize.*”).



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17. Per claim 19 (Currently Amended)

Li discloses

A computer system that executes an optimizing computer program comprising:

- a compiler that inputs a selection command, said selection command selecting one function from a list of pre-selected functions into said computer program (col.21 lines 16-23 “*The pre-specified optimizing criteria for a computer software generation, modification, use, maintenance, or performing a specific function may be a feature selected from the group consisting of ...*”), wherein each function from said list of pre-selected functions is associated with a reward (col.21 lines 26-30 “*...selected control variables to determine the improving or optimizing variable combination*”).
- a software module that includes a learning protocol in said computer program to track and reward said one function that is selected and determine an approximate optimal operation of said computer program based on at least said selection command (col.13 lines 41-46 “*The automation manager may also interact with self-optimizing system by reading the three of four options on the display monitor picturing the relative risks and rewards of the options, selecting the best option based on the most current demand and supply situation, and directing the system to re-optimize.*”).

18. Per claim 25 (Currently Amended)

Li discloses

A computer system that executes an optimizing computer program, comprising:

- means for specifying at least one point of choice in said computer program (col.20 lines 5-9 “...*the various optimizing steps such as CAE, CAT, CAO, and CAC...*”).
- means for defining a set of alternate choices at each point of choice (col.19 lines 58-62), wherein said set of alternate choices include operational choices, comprises:
- means for inputting a selection command that selects one function from a list of pre-selected functions into said computer program (col.21 lines 16-23 “*The pre-specified optimizing criteria for a computer software generation, modification, use, maintenance, or performing a specific function may be a feature selected from the group consisting of ...*”), wherein each function from said list of pre- selected functions is associated with a reward (col.21 lines 26-30 “...*selected control variables to determine the improving or optimizing variable combination*”).
- allowing a learning protocol in said computer program to track and reward said one function that is selected to determine an approximate optimal operation of said computer program based on said selection command (col.13 lines 41-46 “*The automation manager may also interact with self-optimizing system by reading the three of four options on the display monitor picturing the relative risks and rewards of the options, selecting the best option based on the most current demand and supply situation, and directing the system to re-optimize.*”).
- means for setting at least one feedback point for each point of choice (col.10 lines 10-11 “*The optimization is sent from CAO step to feed back the information...*”).

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*Response to Arguments*

19. Applicant's arguments with respect to independent claims 1, 7, 13, 19 and 25 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

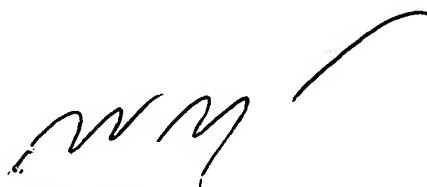
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junchun Wu whose telephone number is 571-270-1250. The examiner can normally be reached on 8:00-17:00 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.<sup>1</sup>

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW



WEI ZHEN  
SUPERVISORY PATENT EXAMINER